

Title (en)  
EXHAUST GAS RECIRCULATION VALVE ASSEMBLY

Publication  
**EP 0234765 B1 19900207 (EN)**

Application  
**EP 87300894 A 19870202**

Priority  
• US 83380386 A 19860228  
• US 91835986 A 19861014

Abstract (en)  
[origin: EP0234765A2] A valve assembly (10) for controlling recirculation of exhaust gases has three solenoid-operated valve members (32) that meter flow of exhaust gases through calibrated outlets (20a) from an exhaust gas chamber (18). Each valve member (32) has a valve stem (30) extending to a respective solenoid armature (28), and each valve stem (30) is surrounded by a pair of spring-biased seals (34,36) that seal openings (44,50) around the valve stem (30) into a respective solenoid coil (24) and the chamber (18). In this assembly (10), each armature-valve member-seal (28,32,34,36) floats laterally to compensate for potential misalignment between the respective solenoid coil (24) and the respective outlet (20a).

IPC 1-7  
**F02M 25/06**

IPC 8 full level  
**F01N 9/00** (2006.01); **F02M 25/06** (2006.01); **F02M 25/07** (2006.01)

CPC (source: EP KR US)  
**F01N 9/00** (2013.01 - KR); **F02M 25/06** (2013.01 - KR); **F02M 26/38** (2016.02 - EP US); **F02M 26/53** (2016.02 - EP US); **F02M 26/67** (2016.02 - EP US); **F02M 26/69** (2016.02 - EP US); **Y10T 137/87877** (2015.04 - EP US)

Cited by  
EP0461688A1; US5180039A; ITBA20090039A1; EP0428274A1; GB2207222A; GB2234041A; FR2649465A1; GB2234041B; EP0816732A3; WO9911921A1

Designated contracting state (EPC)  
DE FR GB IT SE

DOCDB simple family (publication)  
**EP 0234765 A2 19870902; EP 0234765 A3 19880113; EP 0234765 B1 19900207**; AU 587681 B2 19890824; AU 6876387 A 19870903; BR 8700930 A 19871222; CA 1286559 C 19910723; DE 3761686 D1 19900315; KR 870008101 A 19870924; KR 900001391 B1 19900309; US 4725040 A 19880216

DOCDB simple family (application)  
**EP 87300894 A 19870202**; AU 6876387 A 19870213; BR 8700930 A 19870226; CA 528933 A 19870204; DE 3761686 T 19870202; KR 870001525 A 19870223; US 91835986 A 19861014